in Flamingo City hereafter.

It will be remembered that the first records of the breeding within Indian limits of the Avocet and Rosy Pelican were also obtained fortuitously during flying visits to Flamingo City in 1945 and 1960 respectively (*JBNHS 45*:420-21; *57*:413-15). The present discovery of Lesser Flamingo breeding further highlights the potentiality of the Great Rann as a repository of ornithological, and doubtless other, surprises, and emphasizes the desirability of a properly planned biological survey of the entire area.

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6. NOTES ON A SOOTY TERN (*STERNA FUSCATA NUBILOSA* SPARRMAN) COLLECTED NEAR CALICUT

In the first week of June this year a female Sooty Tern was brought to Professor K. J. Joseph of the Zoology Department, Calicut University by a person who had trapped it near the campus. It was an adult bird with very worn and moulting flight feathers. Presumably, it had finished breeding and was blown inland from the coastal area. The campus is about 7 miles distant from the coast of the Arabian Sea and in June we had many strong gales.

This species breeds in the Lakshadweep from December/January to May [Salim Ali and Dillon Ripley, 1969, HANDBOOK OF THE BIRDS OF INDIA AND PAKISTAN Vol. 3:63]. In the specimen examined moult of the feathers of the body had been completed, but the flight feathers (both remiges and rectrices) were still moulting. It measured: wing 297 mm; outer tail feathers 147 mm; bill 39 mm from feathers; tarsus 23 mm. Both wing and tail had broken tips. The ovary had regressed.

Primaries 2 to 8 (counting from the proximal end) had recently completed their growth. In the right wing the 8th primary was about three-fourths and in the left, one-fourth grown. In both wings primaries 9-10 were old. Alula were moulting. As some of the secondaries (including the feathers of the skin overlying the humerus) were missing, they could not be numbered exactly, but we could count 19 in one wing and twenty in the other. The colour, texture, and moult of the secondary feathers suggested that their moult had started at three different points. The outermost or first secondary was moulting in both wings, and the 14th in the left wing alone. In both wings, secondaries 2 to 13 were old and very much worn. The innermost group of

5-6 secondaries (or tertiaries) had apparently completed growth much earlier and were faded to some extent but strong. This suggested that the tertiaries had moulted at a different time.

The greater upper coverts of the remiges had either recently completed growth or were in the final stages of growth, so were the upper lesser wing-coverts and the upper tail-coverts. The upper median wing-coverts were old. All the body tracts of feathers had fresh feathers suggesting a recently completed moult.

The overall pattern of moult of flight feathers suggested a gradual exchange of flight feathers without impairing flight completely at any point. This is important for the survival of the bird as it spends most of its time in the air. Renewal of the upper greater wing-coverts in advance of the moult of remiges themselves, and completing the moult of the tertiaries earlier, are protective. Fully grown upper greater coverts protect the sensitive areas at the base of the growing wing quills; the tertiaries protect the rest of the wing quills in the folded wing.

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7. MORE CUCKOO PROBLEMS

In the nineteen-thirties the *Journal of the Bombay Natural History Society* had devoted a number of pages to "cuckoo problems" concerning the parasitic habits of this bird. The present note is intended to call attention to another "problem": the winter quarters of some cuckoos, especially the Common Cuckoo *Cuculus canorus*. It seems to be an accepted fact that some of the Cuckoo populations spend the winter in India. I have come to doubt this fact after checking the Indian literature and finding that we possess too few records between October and March to accept the assumption that India is a wintering ground for the Cuckoo; these records are: North Kanara, November and February (Davidson, *JBNHS 12*:51), Trivandrum, February (Ferguson, ibid. *15*:664), Maldive Islands, January (Philipps, ibid. *60*:579) and Andaman Islands, November. (Hume, *Stray Feathers 4*:288). The two known records from Sri Lanka are from October (one) and undated (one). The November records may well pertain to belated migrants. Vaurie (THE BIRDS OF THE PALAEARCTIC FAUNA, Non- Passeriformes 1965, p. 569) writes that the Cuckoo "winters in Africa... in small numbers in India, and in smaller numbers in the Indochinese